



(Modified) PTO/SB/21 (12-97)

For use through 9/30/00 OMB 0651-0031

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/092,068
	Filing Date	March 5, 2002
	First Named Inventor	Wada
	Group Art Unit	
	Examiner Name	
Total number of pages This Submission	Attorney Docket No.	100/08711

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form (in duplicate)	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawings	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> No Fee Required	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Amendment/Response	<input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> After Final	<input type="checkbox"/> To Convert a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below):
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	PTO Form 1449 (1 page)
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Small Entity Statement	Written Opinion
<input checked="" type="checkbox"/> Info. Disc. Stmt. (2 pages)	<input type="checkbox"/> Request for Refund	1 reference
<input type="checkbox"/> Certified Copy of Priority Document(s)		Return Receipt Postcard
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Authorization to Charge Deposit Account Please charge Deposit Account No. 03-0177 for any additional fees associated with this paper or during the pendency of this application.	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	Remarks	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	Andrew L. Fillen	Reg. No.	44,107
Signature	<i>Andrew L. Fillen</i>		
Date	4-11-03		

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231 on this date: <u>April 11, 2003</u>		
Typed or Printed Name	Michelle Chan	
Signature	<i>Michelle Chan</i>	Date: <u>April 11, 2003</u>

APR 22 2003

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PATENT
100/08711



April 11, 2003
By Michelle Chan
Michelle Chan

TECH CENTER 1600/2900

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

H. GARRETT WADA et al.

Application No.: 10/092,068

Filed: March 5, 2002

For: METHODS AND SYSTEMS FOR
INTRACELLULAR BINDING
REACTIONS

Examiner: Unknown

Art Unit: Unknown

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR § 1.97 AND 1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The reference cited on the attached form PTO-1449 is being called to the attention of the Examiner. A copy of the reference is enclosed. Also enclosed is a copy of the Written Opinion from the corresponding International Application.

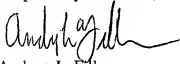
It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR § 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is made that a search has been conducted or that this statement encompasses all possible relevant information.

H. GARRETT WADA et al.
Serial No. 10/092,068
Page 2

Applicants believe that no fee is required for submission of this statement, since it is being submitted within three months of the filing date or prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to charge such fee to Deposit Account No. 03-0177. Please charge any additional fees or credit any overpayment to the above-noted deposit account.

Respectfully submitted,



Andrew L. Filler
Reg. No. 44,107

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ALF:mc



Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/092,068
		Filing Date	March 5, 2002
		First Named Inventor	Wada
		Art Unit	
		Examiner Name	
Sheet	of	Attorney Docket Number	100/08711

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	AA				
	AB				
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	AD				
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	AF				
	AG				
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	AI				
	AJ				
	AK				
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FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code - Number - Kind Code (if known)				
	AM					
	AN					
	AO					

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	AP	SOKOL, D.L. et al., "Real time detection of DNA-RNA hybridization in living cells", <u>PNAS</u> (1998) 95:11538-11543	
	AQ		
	AR		
	AS		
	AT		

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: JONATHAN ALAN QUINE
THE LAW OFFICES OF JONATHAN ALAN QUINE
P.O. BOX 458
ALAMEDA CA 94601

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APR 04 2003

Quine Intellectual Property Law Group P.C.

PCT

WRITTEN OPINION

(PCT Rule 66)

Date of Mailing
(day/month/year) **26 MAR 2003**

Applicant's or agent's file reference
01-056900PC

REPLY DUE within ONE month
from the above date of mailing

International application No.
PCT/US00/35667

International filing date (day/month/year)
28 DECEMBER 2000

Priority date (day/month/year)
06 JANUARY 2000

International Patent Classification (IPC) or both national classification and IPC
IPC(7): C12Q 1/00 and US Cl.: 435/4

Applicant
CALIPER TECHNOLOGIES CORP.

RESPONSE DUE April 26, 2003
(optional)

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step or industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension; see Rule 66.2(d).~~

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.3 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 06 MAY 2002

Name and mailing address of the IPEA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 505-5250

Authorized officer

Ethan Whisenant, Ph.D.

Telephone No. (703) 508-0196

DOCKETED

JH 4/4/03

WRITTEN OPINION

International application No.

PCT/US00/35657

I. Basis of the opinion

1. With regard to the **elements** of the international application:*☒ the international application as originally filed☒ the description:

pages 1-23, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of

☒ the claims:

pages 24-28, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages NONE, filed with the letter of

☒ the drawings:

pages 1-5, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of

☒ the sequence listing part of the description:

pages NONE, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

☒ the description, pages NONE
☒ the claims, Nos. NONE
☒ the drawings, sheets/fig. NONE

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed".

WRITTEN OPINION

International application No.

PCT/US00/35657

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. statement

Novelty (N)	Claims <u>1-55</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>2, 7-18 and 30-33</u>	YES
	Claims <u>1, 3-6, 19-29 and 34-35</u>	NO
Industrial Applicability (IA)	Claims <u>1-55</u>	YES
	Claims <u>NONE</u>	NO

2. citations and explanations

1. Claim(s) 2, 7-18 and 30-33 meet the criteria set out in PCT Article 33(2)-(4).

2. Claim(s) 1, 3-6, 19-29 and 34-35 lack an inventive step under PCT Article 33(3) as being obvious over Sokol et al. in view of Checovich et al. (1995).

Sokol et al. teach a method of detecting intracellular binding interactions which comprises all of the limitations recited in Claim 1 except these authors do not teach measuring the amount of binding between the first and second components within the cell by measuring polarized fluorescence emitted from within the biological cell. However, Checovich et al. do teach using fluorescence polarization as well as the advantages of fluorescence polarization analysis over other methods of analysis. Therefore, absent an unexpected result it would have been *prima facie* obvious at the time of the invention to use polarized fluorescence in the method of Sokol et al. in order to gain the advantages described by Checovich et al. Furthermore, absent an unexpected result, the substitution of one known method of analysis with known properties for a second well known method of analysis with known properties and advantages is routine in the art. As regards the motivation to make the substitution recited above, the motivation to combine arises from the expectation that the prior art elements will perform their expected functions to achieve their expected results when combined for their common known purpose.

3. Claim(s) 1-33 meet the criteria set out in PCT Article 33(4).

----- NEW CITATIONS -----

SOKOL et al. Real time detection of DNA-RNA hybridization in living cells. PNAS, USA. September 1998, Vol. 95, pages 11538-11543.

WRITTEN OPINION

International application No.

PCT/US00/55857

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

TIME LIMIT:

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.